Road (rōd), n.  
A wide way leading from one place to another, which vehicles can use.  
(Oxford Dictionary)
2-5%
Evolving mobility systems –
The opportunity for the telecom industry?

A set of three waves to come!

- **CORE**
  - Smart devices, enhanced connectivity to the network, increasing data traffic, data security, and infrastructure enablement

- **ADJACENT**
  - Enhanced cross-device and mixed-mode content aggregation and delivery, interoperability solutions, ubiquitous “future of connectivity” technologies, cross-device/vehicle identity and customer 360 management, fleet management solutions

- **TRANSFORMATIONAL**
  - Seamless intermodal (end-to-end) mobility solutions, mobility-as-a-service solutions, augmented/virtual reality content integration solutions, vehicle-smart infrastructure ecosystem integration, predictive analytics-driven solutions for monitoring/maintenance

**Evolving Impact and criticality**

- From connecting individual end points (one-to-one)...
- To multiple connected end points (many-to-many)
- ...to end-to-end mobility experiences

**Evolving depth and integration**

__Forbes__

**Autonomous Cars Won't Work – Until We Have 5G**

__Bijan Klerkar__ Contributor

- Tweets: creating chips that will turn cars into data centers on wheels, thus enabling self-driving cars to make in-situ, complex, real-time decisions.

__Forbes__

__Autonomous Cars Won't Work – Until We Have 5G__

__Bijan Klerkar__ Contributor
Three Use-cases for 5G in autonomous mobility

**Use Case: Autonomous Cars**
- Infotainment
  - Customization
  - Work environment
  - Travel Information
  - Entertainment
  - Smartphone integration
- Operations
  - Route Planning
  - Rider Matching
  - Predictive Maintenance
  - Energy Optimization
  - Payment & Revenue Management
- Control (Safety Critical of Life)
  - V2X Communication
  - Headway Control & Relative Positioning
  - Access Control & Security
  - Emergency Management
  - Routing and Guideway Control
  - Environmental Observation

**Use Case: Autonomous Drones/VTAL**

**Use Case: Guided Autonomous Systems**